### **Profile Page**



Name : Dr Suneel Dutt

Designation : Assistant Professor

Department : Physics

Qualification : PhD Physics (Panjab University)

M.Sc. Physics (RDVV, Jabalpur) B.Sc. Non-medical (HPU, Shimla)

B.Ed. Teaching of Science & Mathematics (Jammu

University, Jammu)

CSIR-UGC(JRF) Physics (CSIR-UGC) GATE(Rank-275) Physics (MHRD)

Address : A#701

Dr. B. R. Ambedkar National Institute of Technology

Jalandhar, Punjab - 144027

Email : dutts@nitj.ac.in

Phone : 8894956400

#### **Research Interests:**

Charge Parity (CP) Violation, Beyond standard model physics, Detector Development, Collider physics, Hadron physics simulations.

### **Other Profile Links:**

### Google Scholar Link:

Suneel Dutt Click Here

### **Journal Publications:**

Year	Journal	Publication
2013	PHYSICAL REVIEW D 88,	Search for ZH->llbb-bar Production in 9.7 fb-1 of pp-bar collisions with
	052010	the D0 Detector.
2012	Physical review letters 109 (12),	Search for the Standard Model Higgs Boson in ZH->llbb-bar Production
	121803	with the D0 Detector in 9.7 fb-1 of pp-bar Collisions at $s = 1.96 \text{ TeV}$
2010	Nuclear Instruments and Methods	b-Jet identification in the D0 experiment.
	in Physics Research Section A:	
	Accelerators, Spectrometers,	
	Detectors and Associated	
	Equipment Volume 620, Issues	
	2–3, 11–21 August 2010, Pages	
	490-517	

## **Conference Publications:**

Year	Conference	Publication
2021	65th DAE symposium on Nuclear Physics, DAE,	Asymmetric quark matter in (2+1)-flavor Polyakov
	Mumbai, 65 2021 583-584	quark meson model, Nisha Chahal, Suneel Dutt,
		Arvind Kumar
2020	The 5th international conference on particle physics	Kaons and Antikaons in Multi-Phase Transport
	and Astorphysics., National Research Nuclear	Model, Nisha Chahal, Suneel Dutt, Arvind Kumar
	University, Mephi, Moscow Engineering Physics	
	Institute, 1690, 012077	
2020	Soft Computing: Theories and Applications, 1053,	A Monte Carlo Simulation Study of the Angular
	1291-1302	Correlations by Using Z+Jets Events at Centre of
		Mass Energy of 14 TeV, Bharti, M., Sharma, V.,
		Sikander, A., Verma, O.P., Dutt, S.
2020	Soft Computing: Theories and Applications, 1053,	Afzal Sikander, Shiv Sagar Singh, Om Prakash
	1363-1372	Verma, S. Sathiya, Varun Sharma & Suneel Dutt

# **Research Projects:**

Role	Project	Title	Funding	From	To	Amount	Status	Co-Investi
	Type		Agency					gator
Principal	Externally	Search for	Department			INR	Complete	None
Investigator	Funded	physics	of Science			17,79,	d	
		beyond	and			600/-		
		standard	Technology					
		model at						
		hadron						
		colliders						
		using						
		DZERO and						
		compact						
		muon						
		solenoid						
		(CMS)						
		energies.						
Principal	Externally	CMS	Department			INR	Complete	None
Investigator	Funded	upgrade,	of Science			56,00,000	d	
		operation and	and			/-		
		Utilization	Technology					

## **Events Organized:**

Category	Type	Title	Venue	From	To	Designation
Short Term	National	Emerging Fields on	Department of	15-07-2019	19-07-2019	Coordinator
Course		High Energy Physics	Physics, NIT			
(STC)			Jalandhar			
Self-sponsor	National	Use of LaTex in	Department of	31-08-2020	04-09-2020	Coordinator
ed workshop		typesetting technical	Physics, NIT			
		documents.	Jalandhar through			
			online mode.			

Short Term	National	Advances in High	Department of	18-09-2020	22-09-2020	Coordinator
Course		Energy Physics	Physics, NIT			
(STC)			Jalandhar through			
			online mode.			
Short Term	National	Machine Learning:	Department of	09-09-2020	13-09-2020	Coordinator
Course		Theory and	Physics, NIT			
(STC)		Applications	Jalandhar through			
		(MLTA-2020)	online mode.			
DST	National	Statistical Techniques	Department of	22-11-2021	26-11-2021	Coordinator
sponsored		for Data Analysis	Physics, NIT			
workshop			Jalandhar through			
			online mode.			
One day	National	Revision of the course	Department of	13-08-2020	13-08-2020	Coordinator
workshop		curriculum of B.Tech	Physics, NIT			
		Physics first year.	Jalandhar through			
			online mode.			
Self-sponsor	National	LaTeX for beginners.	Department of	04-01-2023	08-01-2023	Coordinator
ed workshop			Physics, NIT			
			Jalandhar			
DAE-BRNS	National	Workshop on Hadron	Department of	16-01-2023	20-01-2023	Coordinator
sponsored		Physics-2023	Physics, NIT			
workshop			Jalandhar			

## PhD Supervised:

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Bipen Singh	Search for Contact Interactions using inclusive	Awarded	2020	Professor Suman Bala
	Jet $P_{T}\$ spectrum at $\sqrt{s}=13$ TeV.			Beri, Panjab University,
				Chandigarh
Monika Bharti	The study of Underlying Event activity and two	Awarded	2020	None
	particle Angular Correlation with particles and			
	Z-boson using low pileup data.			
Shalini Thakur	Search for the Excited Leptons in pp collisions at	Awarded	2019	Professor Suman Bala
	center of mass energy $\sqrt{sqrt{s}}=13 \text{ TeV}$ .			Beri, Panjab University,
				Chandigarh
Rishika Bhardwaj	Search for heavy Charged Higgs Boson decaying	Awarded	2018	Professor Suman Bala
	to tb at center of mass energy \$\sqrt{s}\$ of 13			Beri, Panjab University,
	TeV			Chandigarh

## Admin. Responsiblities:

Position Held	Organization	From	To
Deputy Registrar (Finance)	NIT Jalandhar	23-Oct-2018	05-01-2019
Institute Time-Table Co-ordinator	NIT Jalandhar	02-Mar-2021	till date